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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/709,322

04/28/2004

Gary L. Rytlewski

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07/06/2005

SCHLUMBERGER RESERVOIR COMPLETIONS
14910 AIRLINE ROAD
ROSHARON, TX 77583

EXAMINER

STEPHENSON, DANIEL P

ART UNIT

PAPER NUMBER

3672

DATE MAILED: 07/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/709,322

Applicant(s)

RYTLEWSKI ET AL.

Examiner

Daniel P. Stephenson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 April 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12, 15-27 and 29-34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12, 15-23, 25-27 and 29-34 is/are rejected.
- 7) ☒ Claim(s) 24 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 July 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
2. Claims 15 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over the pre-grant publication '552 to Moss (hereafter Moss '552). Moss '552 (Figures 2 and 3, para. 11-29) discloses an apparatus for use with a subsea well. The apparatus has a carrier line spool which has a carrier line that is adapted to be positioned underwater and to be operatively coupled to subsea wellhead equipment. The carrier line spool is a coiled tubing or wireline spool. There is an injector head adapted to drive coiled tubing from the coiled tubing spool, the injector head located on a stack on the wellhead, along with the coiled tubing spool. The apparatus also has a carousel containing a plurality of intervention tools. The carousel is rotatable underwater to enable switching of tools for connection to the carrier line. An underwater marine unit is adapted to operatively couple the carrier line to the subsea wellhead equipment, namely an ROV. The ROV takes down an umbilical line to the stack to receive command signals. It does not disclose that the ROV is controlled through wireless acoustic wave signals. It is Officially Noticed (see remarks below, Sonnenschein et al.) that it is notoriously conventional in the subsea art to control a ROV through an assortment of technologies, including acoustic wireless signaling, umbilical with digital/electronic signaling, wireless digital signal, fiber optics, etc. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to control the ROV of Moss '552 through the use of wireless acoustic signals. This would be done to allow for more flexibility in the movement of the ROV.

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3. Claims 1-3, 5, 6, 9, 10, 17, 18, 20-23, 25 and 33 and 34 are rejected under 35 U.S.C.

103(a) as being unpatentable over Moss '552. Moss '552 shows all the limitations of the claimed invention, except, it does not disclose that the stack is separate from the carrier spool. It would have been obvious to one of ordinary skill in the art at the time the invention was made to separate the sections of the stack carrying the spool and the injector, since it has been held that constructing a formally integral structure in various elements, i.e. two stacked boxes instead of one frame, involves only routine skill in the art. *Nerwin v. Erlichman*, 168 USPQ 177, 179.

4. Claims 4, 7, 19 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Moss '552 as applied to claims 1, 6, 17 and 18 above, and further in view of Avakov et al. Moss '552 shows all the limitations of the claimed invention, except, it does not disclose that the carrier spool is placed on the sea floor or that there is a gooseneck that attaches the line to the injector of the stack. Avakov et al. discloses, as is common with many wellhead arrangements, that the carrier spool is located on the floor near the stack. The line moves through a gooseneck within the stack above the wellhead when it is injected. It would have been obvious to one of ordinary skill in the art at the time the invention was made to place the spool of Moss '552 on the floor and inject the line through a gooseneck as taught by Avakov et al. This would be done so that there was less weight on the wellhead and/or stack.

5. Claims 8 and 30-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Moss '552 in view of Kogure et al. Moss '552 shows all the limitations of the claimed invention, except, it does not disclose that there are buoyancy tanks located on the stack or carrier spool. Kogure et al. teaches the usefulness of buoyancy tanks when dealing with subsea vessels (col. 4 lines 31-51). Therefore, it would have been obvious to one of ordinary skill in the art at the time

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the invention was made for the apparatus of Moss '552 to use the buoyancy devices as claimed by Kogure et al. This would allow greater control over the apparatus and allow them to come to the surface when necessary.

6. Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Moss '552 in view of Avakov et al. as applied to claim 26 above, and further in view of Kogure et al. Moss '552 in view of Avakov et al. shows all the limitations of the claimed invention, except, it does not disclose that there are buoyancy tanks located on the stack or carrier spool. Kogure et al. teaches the usefulness of buoyancy tanks when dealing with subsea vessels (col. 4 lines 31-51). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made for the apparatus of Moss '552 in view of Avakov et al. to use the buoyancy devices as claimed by Kogure et al. This would allow greater control over the apparatus and allow them to come to the surface when necessary.

7. Claims 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Moss '552 as applied to claim 1 above, and further in view of Reynolds. Moss '552 shows all the limitations of the claimed invention, except, it does not disclose that there is an emergency disconnect package in the stack nor does it state that there is a connector between the emergency disconnect and the wellhead. Reynolds discloses an emergency disconnect (45) for use with a subsea well. Naturally, since the emergency disconnect is attached to the wellhead, then there is a connector between the disconnect and the wellhead. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use an emergency disconnect on the apparatus of Moss '552. This would be done to prevent any catastrophes should the stack break away from the wellhead do to undersea current.

Allowable Subject Matter

8. Claim 24 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

9. Applicant's arguments filed 4/11/05 have been fully considered but they are not persuasive.

10. It was requested by the applicant that documentary evidence be provided for the Official Notice taken in the previous and current actions. Sonnenschein et al. discloses an ROV that receives acoustic wireless signals to communicate and instruct it. As stated in the official notice, wireless communication allows for more flexibility in where an ROV may travel.

11. It is the assertion of the applicant that Moss '552 teaches away from separating the space frame into two sections. Examiner respectfully traverses this assertion. It is the interpretation of the examiner that when Moss '552 states, "The intervention system is enclosed inside a space framed to provide structural support for the components as they are transported, retrieved or repaired," it is not precluded from separating the frame into sections. The frame is designed to "transfer load through its members". This goal would still be accomplished if the frame were separated at the center point between the boxes of the frame 29, as it is shown in Fig. 2.

12. It is the assertion of the applicant that Avakov et al. as used above, teaches only using a carrier spool "located on a truck for mobile operations". Examiner respectfully traverses this assertion. While Avakov et al. does disclose using the spool from a truck location, it states that it is "typically supported on a truck" (col. 5 line 54). This does not mean that it is only supported

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on a truck. Avakov et al. also discloses that the tubing is used at a subsea (col. 5 lines 39 and 40) location. This fact when taken with Figure 1 of Avakov et al. has led the examiner to the conclusion that the spool may be placed next to the stack at a subsea location.

13. It is the assertion of the applicant that Moss would not be combined with Kogure et al. due to the nature of the patents. Moss is directed to the elimination of a riser from an underwater installation while Kogure et al. is directed to a riser and riser stabilization system. While this would be true if I were using the primary function of the Kogure et al. patent in combination with Moss, it is not when just using the buoyancy tanks as disclosed in Kogure et al. Applicants assert that one cannot ignore portions of the patent and must consider the entire document. The examiner agrees with this statement. The entire document was considered, and it was found to show that buoyancy tanks could be used to lift subsea vessels. Just because something is disclosed as performing a function on one object does not preclude it from performing a similar function on other objects. Therefore, although the Kogure et al. document is directed to using buoyancy tanks on a riser while the Moss '552 document teaches away from using a riser, this does not prevent the use of the buoyancy tanks of Kogure et al. on another object, i.e. the stack of Moss '552.

Conclusion

14. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after

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the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel P. Stephenson whose telephone number is (571) 272-7035. The examiner can normally be reached on 8:30 - 5:00 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David J. Bagnell can be reached on (571) 272-6999. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



David Bagnell
Supervisory Patent Examiner
Art Unit 3672

DPS *DP*